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Applicant:	A Christian Tahan	Examiner:	Alexandra F. Awai
Application No:	10/537,532	Art Unit:	3663
Filing Date:	06/03/2005		
Title:	Method & Apparatus For the Production Of Energy		
Atty. Docket:	GQUANTA-101		

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RULE 132 DECLARATION

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Now comes A. Christian Tahan and deposes and says:

1. That I am the inventor of the subject invention of U.S. Patent Application No. 10/537,532 and am aware of the Examiner's rejections of my application based primarily on unoperability.

2. That I have provided experimental data in my patent application confirming the claimed subject matter.

3. That on May 10, 2002, I started experiments to ascertain the effect of subjecting nuclei at room temperature to a magnetic field to produce energy.

4. That as a result of this experiment elements were formed that do not exist naturally in nature absent the types of energy associated with the sun.

5. That originally starting with tungsten, after subjecting the tungsten to a bath of H_2SO_4 and to the 2Hz oscillations in a magnetic field of 2000 Gauss, the existence of

einsteinium, uranium, radium, and californium were detected utilizing either a differential thermal analysis machine or a germanium detector.

6. That these elements were produced as evidenced by the detection of their melting points due to proton decay ($p \rightarrow n, e^{+}, \upsilon_e$) is illustrated below:

	Melting Point Detected	Total Binding Energy Gain	Energy Release After Element Formation	(n→p beta decay)
W + 68n→ Es	860°C	380MeV	19.55MeV	25 protons from n → p
W + 54n → U	1132°C	246MeV	14.08MeV	18 protons from n → p
W + 42n→ Ra	700°C	179MeV	10.95MeV	14 protons from n → p
W + 67n→ Cf	900°C	373MeV	18.77MeV	24 protons from n → p

7. That the neutron source for the above reactions was due to the decay of protons and that no other source of neutrons was present in the experiment.

8. That the production of the above elements resulted in the release of the indicated energies due to the naturally occurring n → p beta decay (after element formation from the addition of neutrons to tungsten).

9. That the total binding energy gains when forming the new elements are as listed above.

10. That the above production of energy substantiates Claim 1 and the claims that depend therefrom, and that the detection of the indicated elements substantiates Claim 11 that claims a method of producing room temperature fusion "such that the proton decay results in the production of a third element."

11. That Claim 13 and the claims that depend therefrom claiming apparatus for generating energy are substantiated by the release of energy detected in the above experiment.

12. That the following steps were taken to verify generation of elements:

Materials

(a) 2000 Gauss permanent gap magnet

(b) H_2SO_4

(c) Tungsten powder

(d) Low-frequency antenna, 22-gauge copper wire

(e) 2Hz signal source, 12-12.5 volts amplitude (magnitude)

(f) 22gauge copper grounding wire

(g) Container of Schminke copper powder, 400g

(h) Pyrex test tube numbered 9825

(i) Distilled water

Procedure

(a) Locate Pyrex test tube in stand.

(b) Locate poles of permanent magnet around test tube such that the nearest wall of the test tube to the south pole of the magnet is between 1 and 1.2 cm.

(c) Mix 1 mg of tungsten powder to 40 drops of H_2SO_4.

(d) Place acid and tungsten mixture in Pyrex test tube.

(e) Insert distal end of 22-gauge copper antenna wire into test tube to the bottom of the tube, with the antenna wire placed inside the tube such that it is spaced 0.5 mm to 1 cm from the south magnet pole side of the tube.

(f) Insert 22-gauge copper ground wire with the end coiled 4 to 8 times into the test tube in the acid mixture.

(g) Immerse distal end of ground wire in Schminke copper powder, serves as an electron sink.

(h) Apply 2-Hz, 12-12.5-volt signal to antenna for 20 hours.

(i) Remove H_2SO_4 from test tube to leave powder at bottom of the test tube by (a) pipetting out the acid or (b) filtering the mixture with the powder so as to remove the H_2SO_4.

(j) Rinse powder in test tube with distilled water.

(k) Remove distilled water to leave washed powder.

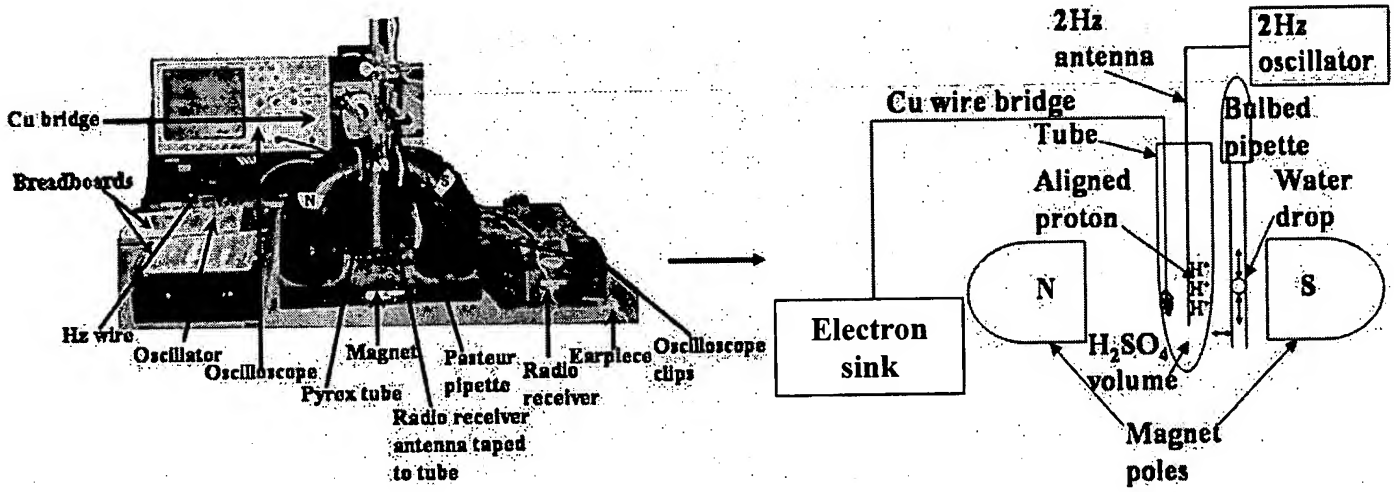
(l) Examine powder to determine presence of elements.

(1) (a) Melt powder in Differential Thermal Analysis (DTA) machine.

(b) Read out melting points from DTA on graph. Or,

(2) (a) Place sufficient quantity of powder on top of germanium detector.

13. That the experimental apparatus used in the above experiment is shown herebeneath:



14. That the following graphs present the experimental results:

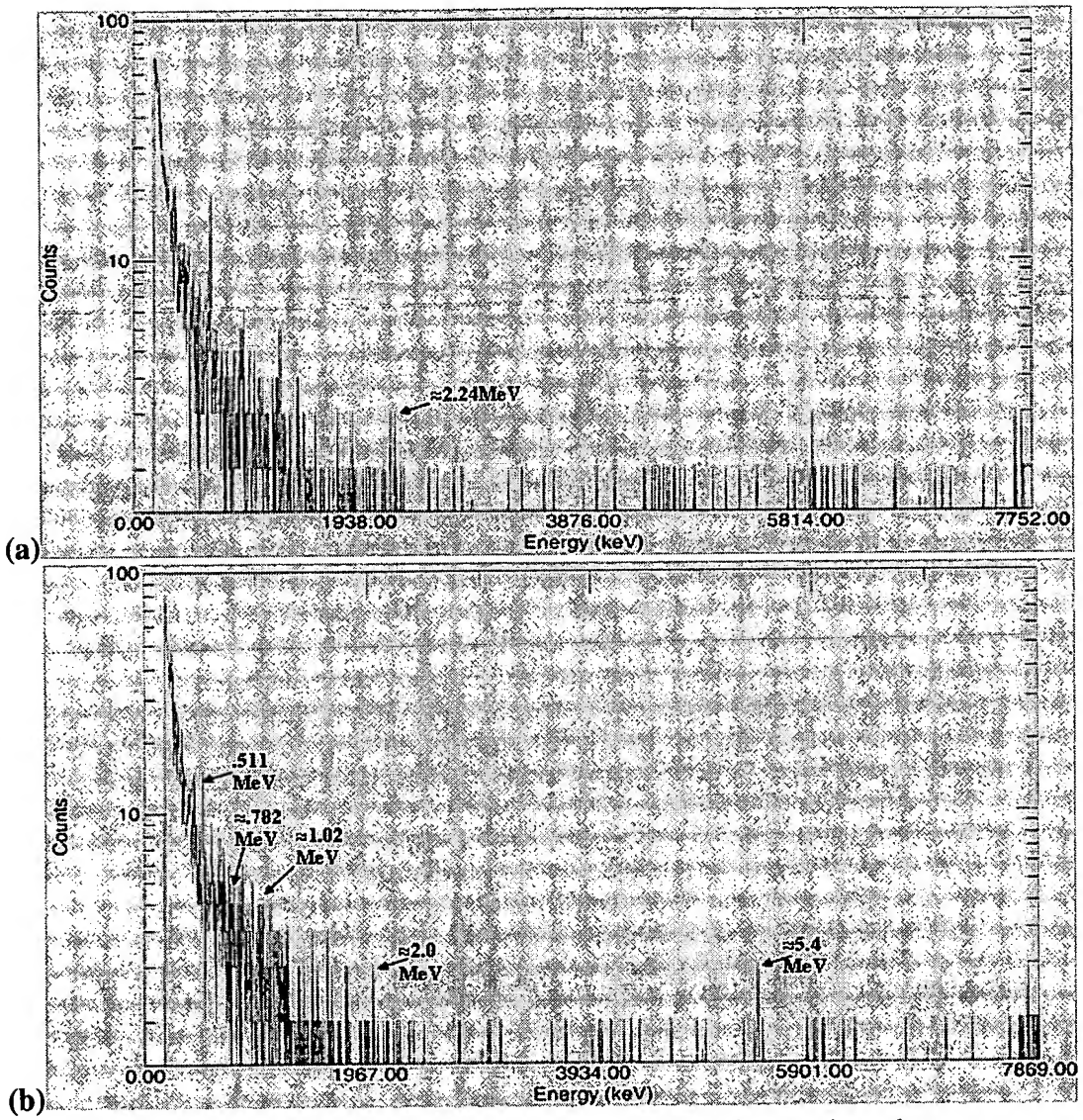
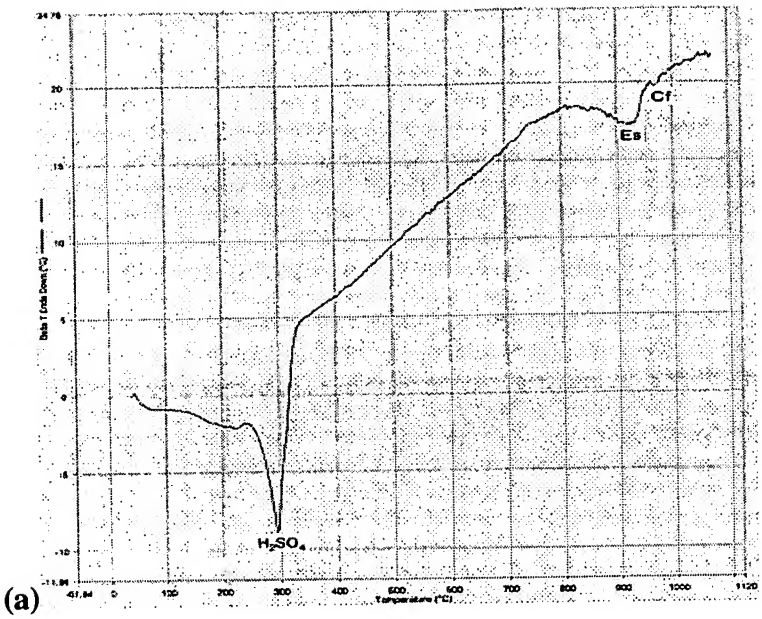
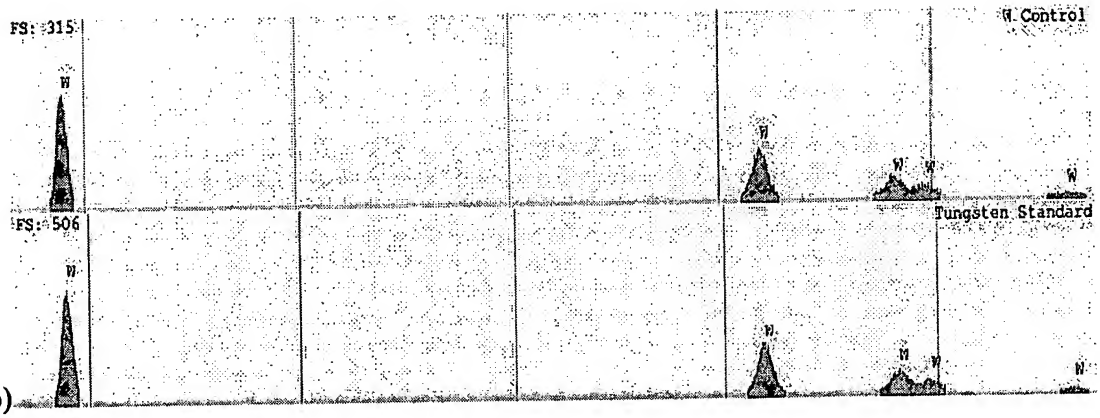


Fig. 1. (a) Deuterium and (b) Helium-3 evidence using a Germanium detector.



(a)



(b)

Fig. 2. (a) Initial DTA showing Es and Cf production. (b) Purity of W source shown using Electron Differential Spectroscopy by comparing with a known pure W source (Tungsten Standard)

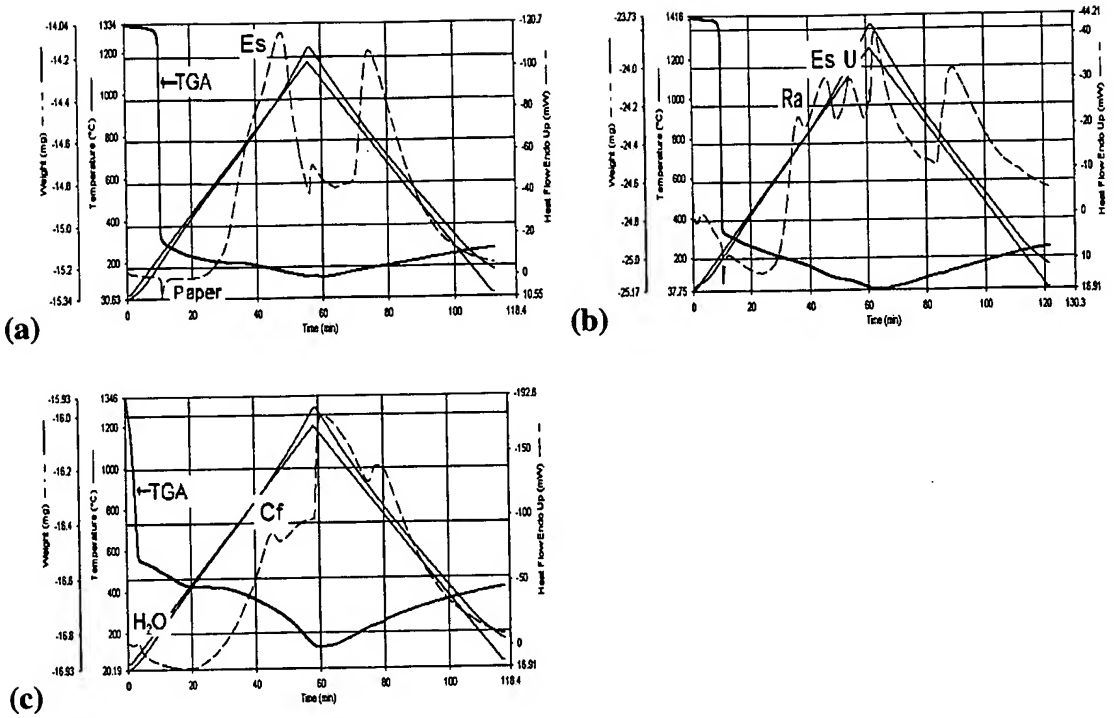


Fig. 3. DTAs of different collections from different experiments than what produced Figure 2 (a) examined with a different DTA machine at a different location; (a) shows melting point peak representing Es production; (b) shows melting point peaks representing Ra, Es, and U productions; (c) shows a melting point peak for Cf production.

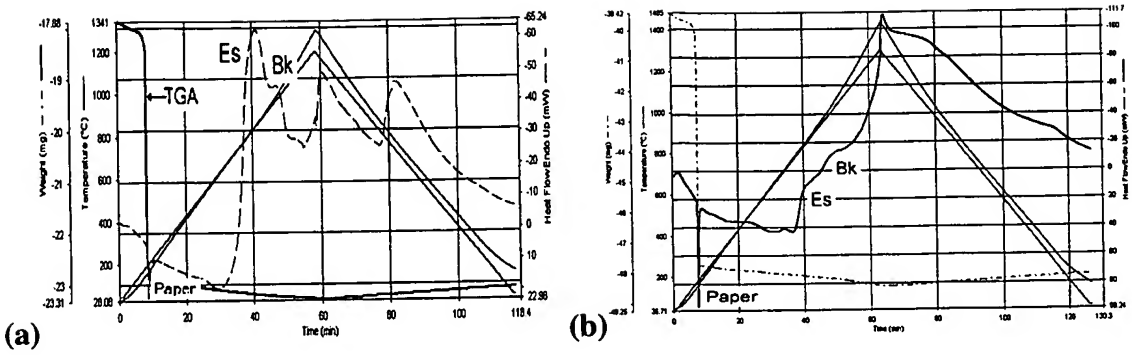


Fig. 4. DTAs of new sample from the collection of Figure 2(a) that shows that Es that was created was decaying to its half-life product Berkelium (Bk) as expressed in literature; (a) and (b) are different samples from the collection using different sample pans (ceramic versus Platinum pans) to make certain observations were not artifacts of the samples reacting with a specific pan; (b) was at a later time than (a) and shows that more Berkelium is present in the sample based on the area of the curve indicating that more Es is gradually becoming Bk.

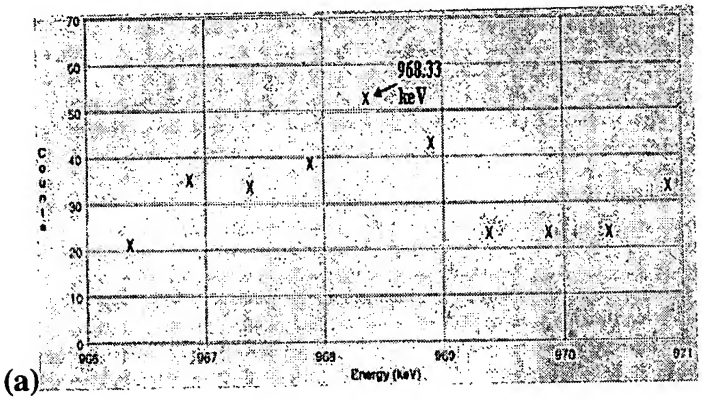


Fig. 5. (a) A Germanium detector reading using a different Ge detector than what was used for Figure 1; the result involved placing the remaining collection from which samples were obtained for Figure 4 on the detector to obtain a separate analysis of contained elements; the detection is an energy peak that is characteristic of Platinum-199 presence in the sample. Specifically, Pt-199 was detected also to have been created from W.

15. That in view of the initial lack of any free neutrons in the experiment, the formation of elements not in the tungsten were due to neutrons created by proton decay of the

protons from the sulfuric acid, with the up-to-then non-existent neutrons enabling the above reactions to occur with the resultant new elements as specified in Claim 11.

16. That the experimental results (Figure 4) show an einsteinium peak and a berkelium peak that is the result of einsteinium decay; and that the data that was collected was collected at the accepted time of decay. [K. Barbalace et al., EnvironmentalChemistry.com periodic table of elements, http://environmentalchemistry.com/yogi/periodic/Es-pg2.html#Nuclides (2004)].

17. That in addition to the elements noted above, the subject experiment produced a 5.4MeV peak corresponding to He-3 and a 2.2MeV peak corresponding to deuterium shown in Figure 1.

18. That sulfuric acid is a good proton donor through electrolytic processes is described in P. Häussinger, R. Lohmüller, A. M. Watson, Ullmann's Encyclopedia of Industrial Chemistry A13 (2002), 297.

19. That according to classical physics a proton cannot enter a nucleus because they are both positively charged and repel each other.

20. That the neutron, having no charge, can enter the nucleus.

21. That the entry of the neutron into the nucleus causes the production of the above elements and the above releases of energy.

22. That the Examiner states that the above process is not possible.

23. That, to the contrary, in nature neutrons enter nuclei and when they do, new elements are produced. [D. Arnett, Supernovae and Nucleosynthesis (Princeton University Press, Princeton, 1996)].

24. That the new elements formed in the subject experiment conform to classical physics rules that state that with the introduction of neutrons into nuclei one can obtain new elements; and that without the neutrons there can be no production of new elements.

25. That new elements are produced using Applicant's technique as evidenced by the experimental results and the graphs presented above.

26. That this verifies the fact that the protons did decay and did produce neutrons, which in turn led to the production of the new elements.

27. That numbers of researchers [V.L. Ginzburg and S.I. Syrovatskii, Usp. Fiz. Nauk 87 (1965) 65 (Annu. Rev. Astron. Astrophys. 3, 297 (1965), Cosmic Magnetobremsstrahlung (synchrotron Radiation)); R. Muller, Decay of accelerated particles, Phys. Rev. D 56 (1997) 953; D.A.T. Vanzella and G.E.A. Matsas, Decay of Accelerated Protons and the Existence of the Fulling-Davies-Unruh Effect, Phys. Rev. Lett. 87 (2001) 15301] have been postulating free proton decay into neutrons, and that CERN in Switzerland has an ongoing project relating to the detection of proton decay.

28. That proton decay has been postulated by the below-noted authors in the listed journals:

T. Friedmann and E. Witten, Unification, proton decay, and manifolds of G_2 Holonomy, Adv. Theor. Math. Phys. 7 (2003) 577; I. R. Klebanov and E. Witten, Proton decay in intersecting D-brane models, Nucl. Phys. B 664 (2003) 3; B. S. Acharya and R. Valandro, Suppressing proton decay in theories of localised fermions, arXiv:hep-ph/0512144; S. Raby, Proton decay, hep-ph/0211024; J. Hisano, Proton decay in the supersymmetric grand unified models, hep-

ph/0004266; H. Dermisek, A. Mafi, and S. Raby, SUSY GUT's Under Siege: Proton Decay or Supersymmetric grand unification under siege: Proton lifetime upper bound, hep-ph/0007213; B. Bajc, P. F. Perez and G. Senjanovic, Proton decay in minimal supersymmetric SU(5), Phys. Rev. D 66 (2002) 075005; Y. Yamaguchi, Possibility of super-weak interactions and the stability of matter, Prog. Theor. Phys. 22 (1959) 373 or D.H. Perkins, From pions to proton decay: Tales of the unexpected; G.K. Backenstoss et al, Nuovo. Cim. 16 (1960) 749 or Y. Yamaguchi, Possibility of super-weak interactions and the stability of matter, Prog. Theor. Phys. 22:373 (1959); D.H. Perkins, Proton decay experiments, Ann. Rev. Nucl. Part. Sci. 34 (1984) 1; K. Hagiwara et al, Review of particle properties, Phys. Rev. D 66 (2002) 010001.

29. That the Examiner's assertion that the indicated reactions cannot occur because they are contrary to the principles of physics is incorrect because researchers have long been postulating proton decay into neutrons.

30. That the experimental results embodied in the graphs in Figures 1 through 5 clearly establish (a) the generation of energy and (b) the generation of new elements.

31. That the Examiner has said that there is no showing of the existence of positron-electron annihilation in accordance with Claim 7.

32. That the graph of Figure 1(b) indicates from the experimental results that particle, anti-particle annihilation has occurred due to .511MeV and 1.02MeV peaks corresponding to the particle, anti-particle annihilation of positrons and electrons, with the anti-particle being the positron.

33. That the above experiment establishes an artificially induced proton-to-neutron decay.

34. That the Examiner says that a proton-to-neutron decay occurs only in the nucleus and that a free proton is classically stable, meaning that it cannot further decay.

35. That contrary to the Examiner's assertion and as postulated in the literature, the above experiment establishes an artificially produced decay of a proton to a neutron.

36. That as to the production of gravitons, theorists have established the fact that gravitons can be produced with proton decay. [P. Langacker, Grand unified theories and proton decay, Physics Reports 72 (1981) 185; J. J. Ellis, D.V. Nanopoulos and K. Tamvakis, Grand unification in simple supergravity, Phys. Lett. B 121, (1983) 123; N. Sakai and T. Yanagida, Proton decay in a class of supersymmetric grand unified models, Nucl. Phys. B 197 (1982) 533; G. Altarelli and F. Ferugulio, SU(5) grand unification in extra dimensions and proton decay, Phys. Lett. B 511 (2001) 257; P. Fayet, New interactions and the standard model, Class. Quantum. Grav. 13 (1996) A19; A. Zee, Dark energy and the nature of the graviton, Phys. Lett. B 594 (2004) 8; P. Langacker, Proton decay, hep-ph/9210238]

37. That over 300 experiments have been done over four years and that it has been found that the results do not significantly vary regardless of small variations in geometry of the test apparatus and that small variations in the distance of a magnetic pole to the solution in the Pyrex tube was not troublesome. Nor was the particular placement of the antenna or the ground wire particularly critical to the ability to demonstrate new elements and energy release. Thus those skilled in the art could clearly practice the invention without undue experimentation.

38. That while the Examiner is questioning where the extra energy is coming from when a proton having one mass decays to a neutron having an increased mass, this is resolved by noting that energy is injected into the system through the 2-Hz electromagnetic wave that is supplied by the antenna in the interaction zone where protons are manufactured from sulfuric acid in an electrolytic process.

39. That extra energy can be used to generate neutrons from protons in a proton decay is shown in a publication in Physical Rev. D Volume 56 entitled "Decay of accelerated particles" by Rayner Muller in which he says that "the missing energy must be supplied by the accelerating device."

40. That in the subject case the "missing energy" is delivered by the 2-Hz source.

41. That both square waves and sinusoidal waves were tested with no noticeable differences in results.

42. That as to the production of protons, the system shown in Figures 3, 5, 8, 9(a), 10 and 11(c) describe an electrolytic process in which protons are generated from sulfuric acid.

43. That such proton generation is also described in Ullman's Encyclopedia of Industrial Chemistry, published by Wiley/VCH Verlag GMBH & Co., on page 53, where it is indicated that through electrolysis protons can be removed from sulfuric acid.

Further deponent sayeth not.

I further declare that all the statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States

Code, and that such willful false statements may jeopardize the validity of the Application or any patent issuing thereon.

A. Christian Tahan

Date: June 20, 2006

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